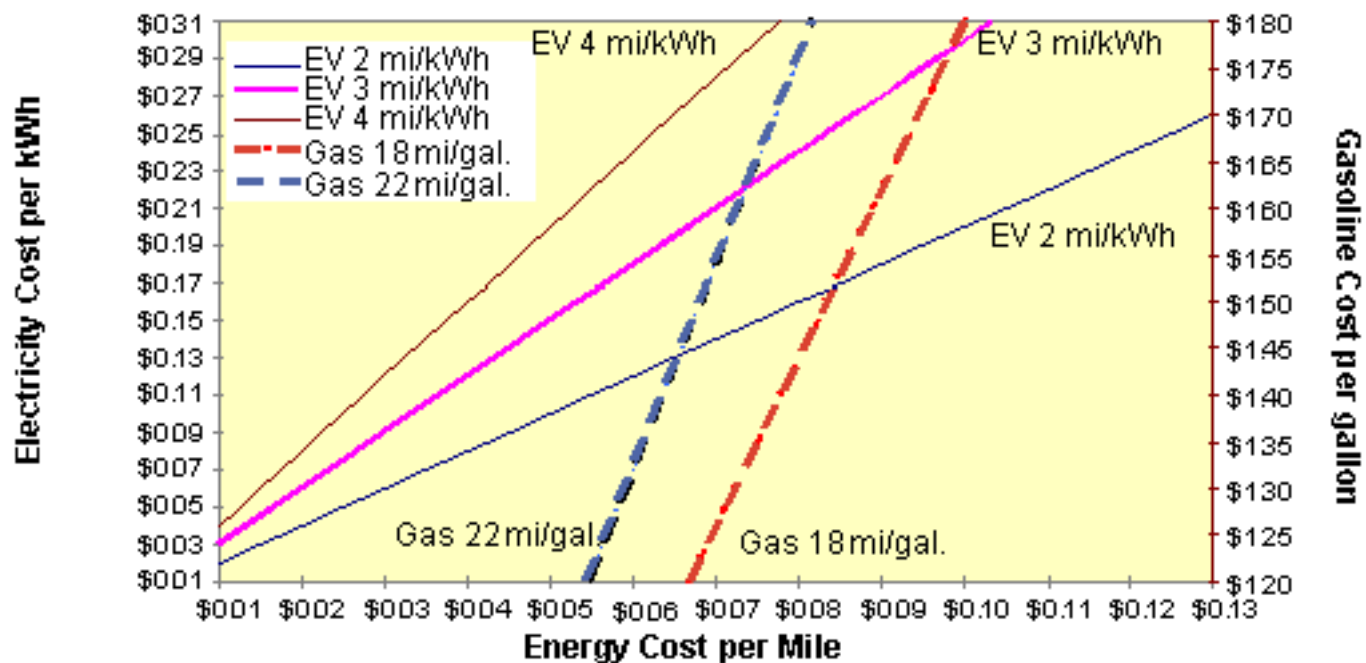


Comparing Energy Costs per Mile for Electric and Gasoline - Fueled Vehicle

The fuel cost of driving an electric vehicle depends on the cost of electricity per kWh and the efficiency of the vehicle. For example, to determine the energy cost per mile of an electric vehicle, select the location on the left axis (Electricity Cost per kWh) at 7 cents in the graph below. Draw a horizontal line to the right until you bisect the EV 3 mi/kWh line. Now draw a vertical line down until you bisect the bottom axis (Energy Cost per Mile). This tells you that the fuel for an electric vehicle with an energy efficiency of 3 miles/kWh costs about 2.3 cents per mile when electricity costs 7 cents per kWh.



The national average cost for electricity is about 6.8 cents per kWh, while the average residential rate is about 8.5 cents per kWh. Some electric utilities have electric vehicle charging rates that vary by time of use, day, and season. These rates range from 3 to 30 cents per kWh. Older electric vehicles in commercial fleets have energy efficiencies of about 2 miles per kWh. Some new electric vehicles, such as General Motors' EV1, have energy efficiencies of over 6 miles per kWh.

To determine the energy cost per mile of a gasoline vehicle, pick the location on the right axis (Gasoline Cost per gallon) at \$1.25. Draw a horizontal line to the left until you bisect the Gas 18 mi/gal line. Now draw a vertical line down until you bisect the bottom axis (Energy Cost per Mile). This tells you that the fuel for a gasoline vehicle with an energy efficiency of 18 miles per gallon costs about 6.9 cents per mile when gasoline costs \$1.25 per gallon.

The gasoline cost per gallon has averaged \$1.05 to \$1.35, depending on the time of year, location, and grade of gasoline. The mileage for commercial fleet vehicles such as light-duty pickups ranges from

below 17 miles per gallon to generally about 22 miles per gallon.